

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An active power filter, comprising:
 - a feedback resistor having first and second terminals;
 - a shunt capacitor having positive and negative terminals;
 - an operational amplifier equivalent subcircuit that includes negative feedback and having positive and negative input terminals and having an output terminal; and
 - a voltage drop source having positive and negative terminals;
- wherein the positive terminal of the shunt capacitor is coupled to a positive terminal of a noisy load device and to a positive terminal of a low noise direct current power supply;
- wherein the negative terminal of the shunt capacitor is coupled to the second terminal of the feedback resistor and to the ~~positive~~ **negative** input terminal of the operational amplifier equivalent subcircuit;
- wherein the first terminal of the feedback resistor is coupled to the negative terminal of the noisy load device and to the output terminal of the operational amplifier equivalent subcircuit;
- wherein the positive terminal of the voltage drop source is coupled to the negative terminal of the operational amplifier equivalent subcircuit;
- wherein the negative terminal of the voltage drop source is coupled to a negative terminal of the low noise direct current power supply;[[.]]

20 wherein the operational amplifier equivalent subcircuit comprises:
21 an operational amplifier having positive and negative input terminals and having
22 an output terminal;
23 a first resistor having first and second terminals;
24 a second resistor having first and second terminals; and
25 a transistor having a gate, a source, and a drain;
26 wherein the positive input terminal of the operational amplifier forms the positive
27 input terminal of the operational amplifier equivalent subcircuit;
28 wherein the drain of the transistor forms the output terminal of the operational
29 amplifier equivalent subcircuit;
30 wherein the first terminal of the first resistor is coupled to the negative terminal of
31 the operational amplifier;
32 wherein the second terminal of the first resistor forms the negative terminal of the
33 operational amplifier equivalent subcircuit;
34 wherein the first terminal of the second resistor is coupled to the gate of the
35 transistor; and
36 wherein the second terminal of the second resistor is coupled to output terminal of
37 the operational amplifier.

1 Claim 2 (Canceled).

1 3. (Original) An active power filter as in claim 2,

2 wherein the source of the transistor is coupled to the negative terminal of the
3 voltage drop source.

1 4. (Original) An active power filter as in claim 2, wherein the operational
2 amplifier equivalent subcircuit further includes:

3 a first capacitor having first and second terminals;

4 wherein the first terminal of the first capacitor is coupled to the output terminal of
5 the operational amplifier; and

6 wherein the second terminal of the first capacitor is coupled to the negative input
7 terminal of the operational amplifier.

1 5. (Original) An active power filter as in claim 4, wherein the operational
2 amplifier equivalent subcircuit further includes:

3 a second capacitor having first and second terminals;

4 wherein the first terminal of the second capacitor is coupled to the gate of the
5 transistor; and

6 wherein the second terminal of the second capacitor is coupled to the output
7 terminal of the operational amplifier.

1 6. (Original) An active power filter as in claim 5, wherein the operational
2 amplifier equivalent subcircuit further includes:

3 a third capacitor; and

4 a third resistor;

5 wherein the third capacitor and the third resistor are connected in series between
6 the gate of the transistor and the negative terminal of the voltage drop source.

1 7. (Original) An active power filter as in claim 2, wherein the transistor
2 comprises an N-channel enhancement mode MOS field effect transistor.

1 8. (Original) An active power filter as in claim 1, wherein the noisy load
2 comprises a switching DC to DC converter.

1 9. (Original) An active power filter as in claim 1, wherein the noisy load
2 comprises a brushless DC fan.

1 10. (Original) An active power filter as in claim 1, wherein the noisy load
2 comprises a switching logic circuit.

1 11. (Original) An active power filter as in claim 1,
2 wherein an impedance of the active power filter is large in comparison to an
3 impedance of the noisy load at a minimum noise frequency generated by the noisy load.

1 Claim 12 (Canceled).